

STUDIES ON THE FAUNA OF SURINAME
AND OTHER GUYANAS: No. 12.

PRELIMINARY LIST OF SYRPHIDAE KNOWN FROM
SURINAME AND BRITISH AND FRENCH GUIANA

by

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The family of Syrphid flies ("Hover flies" or "Flower flies") is richly represented in the Neotropical region. FLUKE's Catalogue of Neotropical Syrphidae, finished in September 1953, records 107 genera and 1,507 species, exclusive of 100 "species incertae sedis." (In actual fact, 1,508 species are enumerated, but *Baccha picta* Wiedemann (FLUKE, p. 259) is an Ethiopian species.) The large genera *Volucella* with 274 species, *Baccha* with 269 species, *Mesograpta* with 130 species, and *Eristalis* with 106 species, seem to have had their greatest opportunity of development in this region. However, some of the names will probably prove to be synonyms, since the descriptions by earlier authors are often too short and insufficient to enable a species to be recognized with certainty. As a rule, the species described by recent authors are quite recognizable.

Up to a few years ago the number of Syrphids described or known from Suriname was very small. Moreover, one of them, *Volucella ardua* Wiedemann, proved to be synonymous with *Volucella tympanitis* Fabricius, as stated by CURRAN, who studied WIEDEMANN's type specimens. Of course, the number of the species taken on occasion in Suriname is somewhat larger; but, as far as is known, no enumeration has ever been published.

In May 1957 the author's son went to Paramaribo to take up an appointment as entomologist at the Agricultural Research Station. He promised to collect and send Syrphids from there. In view of this, I made a list of all the species known from the three Guianas.

CURRAN's work: "The Diptera of Kartabo, Bartica District, British Guiana" formed the basis of the list, and was amplified with species recorded in KERTÉSZ's: "Catalogus Dipteriorum Vol. VII" and further with species described as new after the publication of KERTÉSZ's work (1910). The latter species I found in my own card index catalogue, which is based on the well-known "Zoological Record" and contains all Syrphid species described since 1910.

Owing to receipt of abundant material, I twice had to revise my list. At the suggestion of Dr. D. C. GEIJSKES I have printed the last one here, in order that it may also be of use to other students of the Syrphid fauna of Suriname.

It was necessary to restrict the subjoined list to species known from Suriname and British and French Guiana only. I could not find records of any species from Brazilian Guiana in the literature studied. It is true that the habitat "Amazonas" is given in respect of a few species, but this seems a somewhat vague indication, in view of the large extent of that district. Species known from Venezuela and from Mount Roraima are also omitted, though the fauna of eastern Venezuela will probably prove to be rather similar to that of the Guianas.

For the sequence of the genera, I followed FLUKE's Catalogue; the species are arranged alphabetically. At present, 81 species of Syrphidae are known to occur in Suriname. It may be expected that this number will increase in the future to such a degree that a supplementary list, or a new one, will be necessary.

Unless otherwise stated, all the specimens recorded below, have been collected, carefully mounted, and donated to me by my son P. H. VAN DOESBURG, Junior. He also drew the excellent figures. I should like to express here my heartfelt thanks for his devoted help. I am also much indebted to Dr. D. C. GEIJSKES, Surinaams Museum, Paramaribo; Mr. D. PIET, Zoölogisch Museum, Amsterdam; and Dr. H. C. BLÖTE, Rijksmuseum van Natuurlijke Historie, Leiden, who permitted me to examine material collected in Suriname.

Since this list is intended to be a preliminary one, the author does not think it necessary to give references or citations. For these particulars, students new to Neotropical Syrphidae are referred to the catalogues by WILLISTON, KERTÉSZ, STUARDO and FLUKE.

TABLE 1 (Continued)

Species	Suriname	British Guiana	French Guiana	West Indies	Mexico	Guatemala	Salvador	Panama	Venezuela	Colombia	Ecuador	Peru	Brazil	Bolivia	Paraguay	Argentina	Uruguay	Chili	Also known from:
— <i>signifera</i>			x	x									x						
— <i>smartii</i>				x															
— <i>vittiger</i>				x															
— <i>wilhelmina</i>	x	x																	
— <i>zeleki</i>	x	x																	
<i>Calostigma neuralis</i>			x					x						x					
<i>Salpingogaster nigra</i>	x	x			x	x		x					x			x			
— <i>bipunctifrons</i>			x																
<i>Xanthandrus mexicanus</i>	x	x			x														
<i>Microdon angustus</i>	x	x	x	x															
— <i>angustiventris</i>	x	x	x	x															
— <i>bidens</i>	x	x	x	x															
— <i>carinifacies</i>	x	x	x	x															
— <i>clavicornis</i>	x	x	x	x															
— <i>emeralda</i>	x	x	x	x															
— <i>flavipennis</i>	x	x	x	x															
— <i>fulgens</i>	x	x	x	x															Florida
— <i>granulatus</i>	x	x	x	x															
— <i>guianicus</i>	x	x	x	x															
— <i>hermetoides</i>	x	x	x	x															
— <i>inarmatus</i>	x	x	x	x															
— <i>langi</i>	x	x	x	x															
— <i>machiei</i>	x	x	x	x															
— <i>mixtus</i>	x	x	x	x															
— <i>normalis</i>	x	x	x	x															
— <i>rujiiventris</i>	x	x	x	x									x						
— <i>simillimus</i>	x	x	x	x															
— <i>trivittatum</i>	x	x	x	x															
<i>Ubristes flavitibia</i>				x										x					
— <i>lacteipennis</i>	x	x											x	x					
<i>Pseudomicron beebii</i>			x																
<i>Mixogaster orpheus</i>			x																
<i>Rhoga mellea</i>			x																
<i>Lepidostola ortalina</i>	x	x											x			x			
<i>Volucella alcedo</i>			x						x										Trinidad
— <i>alcedoides</i>	x	x																	
— <i>ardua</i> (cf. <i>tympanitis</i>)			x																
— <i>brevifacies</i>	x	x																	
— <i>claripennis</i>	x	x											x						
— <i>cyanescens</i>	x	x											x						
— <i>cyanoprocta</i>	x	x											x						
— <i>erythrocephala</i>	x	x																	
— <i>esuriens</i>				?	x														Florida; Texas
— <i>florella</i>	x	x							x										
— <i>fracta</i>	x	x																	
— <i>fumipennis</i>	x	x											x						Costa Rica
— <i>guianica</i>	x	x																	
— <i>kahli</i>	x	x																	
— <i>macquartii</i>	x	x				x													Honduras; Trinidad
— <i>macula</i>	x	x				x								x					
— <i>musta</i>	x	x																	
— <i>nigriifrons</i>	x	x																	
— <i>obliquicornis</i>	x	x																	
— <i>pallens</i>	x	x				x							x						Texas
— <i>pallida</i>	x	?	?							x									Described from "Guiana"
— <i>picta</i>	x	x			x	x							x			x			
— <i>tympanitis</i>	x	x											x						
— <i>vaga</i>	x	x											x						
— <i>viripennis</i>	x	x											x						
<i>Ornidia aemula</i>	x	x											x						
— <i>obesa</i>	x	x	x		x	x		x	x	x	x	x	x	x	x	x	x	x	Trop. Africa; Madagas-
— <i>obesoides</i>	x	x			x								x						car; Nw. Caladonia

Subfamily SYRPHINAE

Genus *Allograpta* Osten-Sacken*Allograpta aperta* Fluke

British Guiana: Kaieteur Savannah.

+ *Allograpta scutellata* Sack

SURINAME! 1 ♂, 1 ♀, Paramaribo, 28.7.1957.

Synonym: *Allograpta geminata* Fluke (nov. syn.). SACK described the species from Peru in 1941. Owing to the war, FLUKE did not know SACK's publication, and described *geminata* in 1942 from 1 ♂ and 4 ♀ from Ecuador. He presented me with a ♀ paratype of *geminata*. In a letter to me, he agreed on the synonymy recorded above.

Distribution: Peru, Ecuador, Suriname, Bolivia.

Genus *Mesograpta* Loew

According to FLUKE's Catalogue there are 130 species of *Mesograpta*, for the most part distinguished by differences in the black and yellow markings of mesonotum, scutellum and abdomen. In some species these markings are so variable that the characteristic pattern is largely or wholly unrecognizable.

HULL (1943) wrote a monograph on the genus *Mesogramma* Loew, with a key to the species and 84 figures. LOEW himself changed the genus name *Mesogramma* into *Mesograpta*, since the former name was preoccupied.

+ *Mesograpta basilaris* Wiedemann

SURINAME! Paramaribo; Cultuurtuin; Nickerie District; Wageningen. Very many specimens; the dates of collection cover practically the whole year. 1 ♂ + 1 ♀ (in copula!), road to Affobakka, near Berg en Dal, Suriname, 18.3.1961. - RML: 1 ♀, Suriname, Steenbedrijf; 1 ♀, Nassau Mts., 8.2.1949, Geijskes et al.

This species is extremely variable in colour. Very dark to wholly black specimens are the var. *neotropica* Hull (Paramaribo, Wageningen, det. FLUKE).

British Guiana: Bartica.

Distribution: the whole Neotropical region.

+ *Mesograpta confusa* Schiner

SURINAME! 7 ♂, 9 ♀, Paramaribo, Feb., May, July, Aug. and Sep. 2 ♂, Zanderij, 30.3. and 26.8.1959. - SM: 1 ♂, Wonotobo, 29.7.1959, at light, Geijskes.

Distribution: Argentina, Brazil, Suriname, Mexico.

+ *Mesograpta costalis* Wiedemann

SURINAME: 1 ♀, Marowijne, Albina, 27.1.1951, D. Piet.

This specimen answers fairly well to WIEDEMANN's description of *Syrphus costalis* from Suriname. HALL's *M. flaviplura* from Guatemala is closely related to WIEDEMANN's species, if not the same.

+ **Mesograpta difficilis** Curran

British Guiana: Tumatumari. In the writer's collection a couple from Ecuador (det. FLUKE).

Distribution: British Guiana; Puerto Rico; Ecuador.

+ **Mesograpta duplicata** Wiedemann

SURINAME! 2 ♀; Kabelstation, 22.10.1958 and Estate Morgenstond, 17.2.1959.

Distribution: the whole Neotropical Region.

+ **Mesograpta floralis** Fabricius

SURINAME! About 40 specimens from Paramaribo and apparently present all over the year; 1 ♀ Kwatta, 29.8.1958; 1 ♂, 1 ♀, Republiek, 30.3.1959. – ZMA: 10 ♂, 14 ♀, Republiek, 26.12.1950, D. Piet. – RML: 2 ♂, Tibiti savanne, 8.1.1949; Coppename, 30.7.1943, Geijskes. – SM: 1 ♀, Pr. Willem IV fall, on grass, 3.8.1959, Geijskes; 1 ♀, Toemoek Hoemak, Temomairem, 27.7.1939, Geijskes.

British Guiana: Kartabo.

Distribution: Neotropical Region.

+ *Mesograpta floralis* var. *flammea* Hull: 1 ♂, Paramaribo, 3.7.1959.

+ **Mesograpta laciniosa** Loew

SURINAME! 3 ♂, 2 ♀, Paramaribo, June & Dec. 1957; 1 ♀, Kabelstation-27.10.1958; 1 ♂, Paramaribo, Sep. 1959.

British Guiana: Kartabo.

Distribution: Antilles, Suriname, British Guiana, Peru, Brazil, Argentina.

+ **Mesograpta maculata** Bigot

SURINAME! Paramaribo: 3 ♂, 1 ♀, June 1957; 2 ♀, 6.1.1958; 1 ♀, 14.11.1957; 1 ♀, 24.10.1958; 1 ♂, Sep. 1959; Estate Morgenstond, 1 ♂, 1.1.1959, and 1 ♀, 21.9.1958.

Distribution: Cuba; Mexico; Venezuela; Brazil; Argentina; Paraguay.

+ **Mesograpta musica** Fabricius

SURINAME! Paramaribo: 1 ♂, 18.12.1957; 3 ♀, 5, 24 & 27.10.1957; Zanderij: 1 ♀, 28.7.1958; Albina: 1 ♀, 5.8.1959. – SM: Estate Java, 1 ♂, 12.1.1958, Geijskes. – ZMA: 11 ♂, 5 ♀, Republiek, 26.12.1950; Charlesburg, 1 ♂, 9.2.1950; Estate Waterland, 1 ♀, 3.11.1950; Kabelstation, 8.1.1951; Cultuurtuin, 8.11.1950, D. Piet. – RML: Cultuurtuin, 10.6.1950, Geijskes; Stoelmans Isl., Lawa Riv., 20.3.1953, L. S. Schmidt.

British Guiana: Kartabo.

Distribution: Argentina; Brazil; Suriname; British Guiana; Puerto Rico.

+ **Mesograpta picta** Macquart

SURINAME! 5 ♂, 2 ♀, Brownsberg, 28.2.1959.

British Guiana: Kartabo.

Distribution: West Indies; Panama; Guianas; Argentina.

+ **Mesograpta planiventris** Loew

British Guiana: Kartabo. However, according to CURRAN himself the identification must be considered somewhat doubtful since the two specimens were damaged.

KERTÉSZ's Catalogue records *planiventris* Lw. as a synonym of *marginatus* Say. In the writer's collection 1 ♀ from Georgia (det. FLUKE). LOEW described his *planiventris* from Florida.

+ **Mesograpta polita** Say

SURINAME! 8 ♂, 15 ♀, Paramaribo, 17 & 23.5.1959.

British Guiana: Kartabo.

Distribution: North and South America (acc. FLUKE).

+ **Mesograpta producta** Curran

SURINAME! ZMA: Estate Waterland, 1 ♂, 3.11.1950; 1 ♂, Zanderij, 13.12.1950; 1 ♀, Kabelstation, 8.1.1951, D. Piet.

In the author's collection 2 ♂ from Ecuador (FLUKE don. et det.).

Distribution: Brazil; Argentina; Paraguay; Uruguay; Ecuador; Suriname.

Genus **Baccha** Fabricius

As mentioned above there are 269 species of *Baccha* known from the Neotropical Region. HULL (1947) 1949, published a beautiful Monograph of the New World species of *Baccha*, with a key to the species and 393 figures.

+ **Baccha adspersa** Fabricius

British Guiana: Kartabo.

Further distribution: Panama; Colombia; Peru; Bolivia; Brazil.

In the author's collection 1 ♀ from Nova Teutonia, Brazil.

Baccha atypica Curran

British Guiana. According to CURRAN the species has been recorded from Brit. Guiana by HINE as *conjuncta* Wied.

Described from Brazil. Further distribution: Mexico (acc. FLUKE).

+ **Baccha callida** Hine

SURINAME! 1 ♂, Republiek, 15.10.1959.

Described from Guatemala.

+ **Baccha clavata** Fabricius

SURINAME! 2 ♀, Paramaribo, 24.10.1957 and 29.3.1959.

British Guiana: Bartica District.

Frequent in the whole Neotropical Region. In the author's collection numerous specimens from Brazil, Paraguay and Argentina; also two specimens from Curaçao.

+ **Baccha crocata** Austen

SURINAME! 1 ♀, Republiek, 17.7.1960.

Type-locality: "Amazons." In the author's collection 1 ♂ & 1 ♀ from Rio de Janeiro (FLUKE det. and don.)

+ **Baccha crocea** Austen

SURINAME! 1 ♂, Republiek, 6.12.1959.

Described and figured by AUSTEN from Brazil, region of the Amazons. Further distribution: Panama (acc. FLUKE).

+ **Baccha cultrata** Austen

SURINAME! 1 ♀, Republiek, 6.12.1959.

Also described and figured by AUSTEN from Brazil, Santarem.

Baccha diana Hull

British Guiana: Georgetown (Type-locality).

+ **Baccha dimidiata** Fabricius

SURINAME! 10 ♂, 24 ♀, Paramaribo, frequent during the whole year.

British Guiana: Kartabo.

Common in the Neotropical Region.

+ **Baccha fervida** Austen

SURINAME! 1 ♀, Republiek, 6.12.1959.

AUSTEN described and figured 1 ♂ from Brazil, Santarem.

+ **Baccha flavipennis** Wiedemann

SURINAME! 3 ♂, 4 ♀, Estate Morgenstond, May 1959; 1 ♂, 1 ♀, Republiek, 26/28.8.1959. – SM: 1 ♀, Matta Savanne, 9.3.1954, Geijskes.

In the author's collection 1 ♀ from Bolivia and 1 ♂ without locality.
Described by WIEDEMANN from Brazil.

+ **Baccha gastrostactus** Wiedemann

SURINAME! 12 ♂, 13 ♀, Paramaribo; frequent in January, but also taken in April, May and August. Two ♀ with their empty puparium on the pin and with the note: "Predator of Toxoptera."

Distribution: Neotropical region.

Baccha incompta Austen

British Guiana: Bartica; Kartabo.

Originally described from Brazil, Amazons.

Further distribution: Puerto Rico; Panama; Honduras; Argentina (FLUKE).

+ **Baccha johnsoni** Curran

SURINAME! 1 ♀, Cultuurtuin (upon Mimosa), 28.7.1957. – SM: Litani, near Loë-Creek, in bush, 1 ♂, 15.7.1939, Geijskes.

This is most probably the male of *johnsoni*. CURRAN described the female only.
British Guiana: Bartica (Type-locality).

+ **Baccha livida** Schiner

British Guiana: Bartica (acc. Curran).

Distribution: Brazil; Colombia; Peru; Panama; Mexico; (acc. FLUKE).

In the author's collection 1 ♂ and 3 ♀ from Paraguay.

Baccha nero Curran

British Guiana: Kaieteur (Type-locality).

+ **Baccha norina** Curran

SURINAME! 1 ♂, Estate Morgenstond, 14.9.1958.

Described from Brazil. Further distribution: Argentina; Bolivia; Ecuador. 1 ♀ from Ecuador (FLUKE det. & don.) in the author's collection.

+ **Baccha pictula** Hull

SURINAME! Republiek, 1 ♂, 6.8.1960.

British Guiana: Wallaba Forest, Moraballi Creek, Essquibo Riv. (Type-locality).

Baccha prudens Curran

British Guiana: Kartabo (Type-locality).

+ **Baccha pumila** Austen

SURINAME! 1 ♀, Republiek, 17.7.1960.

Austen described and figured the species after 3 specimens (♂, ♀) from the "Region of the Amazons."

Baccha signifera Austen

British Guiana: Bartica (acc. CURRAN). Originally described from Brazil: Ega.

Baccha smarti Curran

British Guiana: Mazaruni (Type-locality).

Baccha vittiger Hull

British Guiana: Dark Forest, Moraballi Creek, Essequibo River (Type-locality).

+ **Baccha wilhelmina** nov. sp. (*See Appendix*).

SURINAME! Paramaribo: 2 ♂, 28.7.1957; 1 ♂, 1 ♀, 9.1.1958; 2 ♀, 12.1.1958 and 10.5.1959.

+ **Baccha zeteki** Curran

SURINAME! 1 ♂, Paramaribo, 5.9.1959; 1 ♀, Estate Morgenstond, 6.2.1959; 1 ♀, Paramaribo, 15.4.1959; 6 ♂, 8 ♀, Marienburg, 19.6.1961.

CURRAN described the species from specimens from Barro Colorado Isl., Canal Zone, and from Chapada, Brazil.

Genus **Calostigma** Shannon**Calostigma neuralis** Curran

British Guiana: Kartabo (Type-locality).

Genus **Salpingogaster** Schiner**Salpingogaster bipunctifrons** Curran

British Guiana: Kartabo (2 ♀, Type and paratype, 6.4.1922; reared).

+ **Salpingogaster nigra** Schiner

SURINAME! 1 ♀, Marienburg, 25.7.1960. – SM: 1 ♂ with empty puparium, Marienburg, "at froghoppers," larva found May 1951, Meerkamp van Emden; hatched 5.6.1951, Geijskes.

In the author's collection 1 ♂, 1 ♀ from Nova Teutonia, Brazil.

Further distribution: Mexico; Guatemala; Panama; Argentina (acc. FLUKE).

Genus **Xanthandrus** Verrall+ **Xanthandrus mexicanus** Curran

SURINAME! 1 ♀, Paramaribo, 11.1.1958.

The second abdominal tergite has two minute, orange dots, not mentioned in CURRAN's description after 3 ♀ from Yucatan, Mexico.

Subfamily MICRODONTINAE

Genus **Microdon** Meigen+ **Microdon angustiventris** Macquart

SURINAME! 1 ♂, 1 ♀, from "Surinam" (collector unknown), in the author's collection.

British Guiana: Kartabo (acc. CURRAN). Described from "l'Amérique méridionale."

Microdon angustus Macquart

SURINAME! RML: 1 ♂, Nassau Mts., Marowijne, 4.3.1949, Geijskes.

British Guiana: Bartica (acc. CURRAN).

Type-locality: "Cayenne" (= French Guiana).

+ **Microdon bidens** Fabricius

SURINAME! 1 ♀, Paramaribo, 28.1.1960. – SM: Paramaribo, 15.7.1944, "at light," Geijskes.

HINE records 5 specimens from British Guiana, Bartica; and CURRAN 1 ♂ from the same District.

Microdon carinifacies Curran

British Guiana: Kartabo (Type-locality).

Microdon clavicornis Curran

British Guiana: High forest, Mazaruni (Type-locality).

Microdon emeralda Hull

British Guiana: without further locality.

Microdon flavipennis Curran

British Guiana: Bartica (Type-locality).

+ **Microdon fulgens** Wiedemann

SURINAME! 1 ♀, Paramaribo, 20.1.1960.

Distribution: British Guiana; Florida; (acc. FLUKE). Described by WIEDEMANN from "Neugeorgien."

Microdon granulatus Curran

British Guiana: Mazuruni, Amatuk (Type-locality).

+ **Microdon guianicus** Curran

SURINAME! 2 ♂, Paramaribo, 9.12.1957.

Belong probably to this species which CURRAN described from a single ♀ in the British Museum. The writer identified them with CURRAN's "Key" from 1934. It is strange, however, that CURRAN did not include the species in his "Key to the genus *Microdon*" from 1940 (Amer. Mus. Novit. No. 1086). He did also with his *M. tenuicauda* from 1925.

British Guiana: Bartica (Type-locality).

Microdon hermetoides Curran

British Guiana: Moraballi Creek, Essequibo River (Type-locality).

Microdon inarmatus Curran

British Guiana: Bartica, Kartabo, Tukeit (Type-locality).

Microdon langi Curran

British Guiana: Kamakusa; Bartica (Type-locality).

Microdon mackiei Curran

British Guiana: Rockstone. (Type-locality).

+ **Microdon mixtus** Curran

SURINAME! 1 ♀, Paramaribo, 14.12.1957.

According to CURRAN himself it is not impossible that *mixtus* is the female of *mackiei*. The latter has a black facial vitta which should be absent in *mixtus*. Our specimen, however, has a brownish facial stripe. This seems to defend CURRAN's supposition. CURRAN knew only a single ♂ of *mackiei* and a single female of *mixtus*.

+ **Microdon normalis** Curran

SURINAME! 1 ♂, "Suriname," collector unknown, in the author's collection.

British Guiana: West Bank, Demerara River (Type-locality).

Microdon rufiventris Rondani

British Guiana: Bartica (acc. HINE).
Described from Brazil.

Microdon simillimus Hull

British Guiana: Essequibo River (Type-locality).

Microdon trivittatum Curran

British Guiana: Kartabo (Type-locality).

Genus **Ubristes** Walker**Ubristes flavitibia** Walker

British Guiana: Bartica (acc. HINE). It is rather doubtful whether HINE has had the true *flavitibia* Walker before him. He records six specimens from Bartica which were "of the same form and size as *bidens*." *M. bidens*, however, has a length of 16 mm, whilst for the length of *flavitibia* WALKER gives 5 lines, and SHANNON 10 mm.

+ **Ubristes lacteipennis** Shannon

SURINAME! 1 ♂ & 1 ♀, *in copula*, Republiek (forest-path), 29.9.1959.

SHANNON described the ♂ only from two males from the Amazone Region, in the British Museum. With exception of the sexual characters the female is quite similar to the male.

Genus **Pseudomicrodon** Hull**Pseudomicrodon beebei** Curran

British Guiana: Kartabo (Type-locality).

Genus **Mixogaster** Macquart**Mixogaster orpheus** Hull

British Guiana: Bartica (Type-locality).

Genus **Rhoga** Walker**Rhoga mellea** Curran

British Guiana: Tukheit Trail, Kaieteur (Type-locality).

Subfamily CHEILOSINAE

Genus **Lepidostola** Mik**Lepidostola ortalina** v. d. Wulp

SURINAME! 1 ♀, Paramaribo, 16.9.1960.

Described by VAN DER WULP after 1 ♀ from Cordova, Argentina. The species is also recorded from Buenos Aires and Tucumán, Argentina; and Brazil: Chapada.

Subfamily VOLUCELLINAE

Genus **Volucella** Geoffroy**Volucella alcedo** Curran

British Guiana: Bartica; Venezuela (Type-localities).

+ **Volucella alcedoides** Curran

SURINAME! 1 ♂, Paramaribo, 15.8.1957; Paramaribo: 2 ♀, Sept. 1957; 1 ♀, 2.2.1958.

Our ♂ answers in detail to CURRAN's description of 2 ♂ from Trinidad, St. Ann's, Dabadie.

Volucella ardua Wiedemann

Suriname. (See *Vol. tympanitis* Fabr.).

+ **Volucella brevifacies** Curran

SURINAME! Paramaribo, 2 ♀, May 1957 and 18.8.1957. – RML: 2 ♂, 1 ♀, Nassau Mts., 15 Feb., 1 & 11.3.1949, Geijskes c.s.

British Guiana: Kartabo (Type-locality). Argentina (acc. FLUKE).

+ **Volucella claripennis** Curran

SURINAME! 5 ♂ and 19 ♀, all from Paramaribo. According to the dates the species is present there during the whole of the year.

CURRAN described 1 ♂ from Lima, Peru. The ♂ at hand answers well to the description but nearly all specimens (♂ & ♀) are more or less melanic. The yellow color of the third and fourth abdominal segments is either totally missing or scarcely to be seen. In the undescribed ♀ the mesonotum is yellow with three black vittae. The marginal cell is sometimes petiolate, sometimes open or just closed at the costa.

+ **Volucella cyanescens** Macquart

SURINAME! 1 ♂, Republiek, 28.8.1959.

British Guiana: Bartica (acc. CURRAN). Described from Brazil.

Volucella cyanoprocta Curran

British Guiana: Wismar; Kamakusa; Peru. (Type-localities).

Volucella erythrocephala de Geer

Suriname. (See *Appendix*).

+ **Volucella esuriens** Fabricius

British Guiana? "It undoubtedly occurs at the higher altitudes in British Guiana, as I have examined specimens from Venezuela" (CURRAN).

The species was described from the "West-Indies."

In the author's collection 1 ♂ from Florida and a couple from Texas.

Volucella florella Hull

British Guiana: Tumatumari, Potaro River (Type-locality).

Volucella fracta Curran

French Guiana: Cayenne (Type-locality).

+ **Volucella fumipennis** Sack

SURINAME! SM: 7 ♂, 1 ♀, Coeroeni Isl., in the forest flying in sunny places, 4, 5, 11, 12, 14.8., and 7.10.1959, Geijskes; 1 ♂, Coeroeni Isl., 7.10.1959, Creutzberg.

Described by SACK from Peru, Sivia ("Lanternenfang am Abend im Urwald, 1 St.').

In the author's collection: 1 ♂, Suriname, 1902, Schoppl coll.; 3 ♂, 1 ♀, Atalaya, Peru, 13.4.1954, Schunke leg.

Further distribution: Costa Rica (acc. SACK).

Volucella guianica Hine

British Guiana: Bartica (Type-locality).

Volucella kahli Hull

French Guiana: Mana River (Type-locality).

Volucella macquarti Curran

British Guiana: Kartabo (Type-locality).

Further distribution: Honduras; Mexico; Trinidad. (acc. CURRAN).

Volucella macula Wiedemann

British Guiana: Bartica. (acc. CURRAN).

Described from Brazil. Further distribution: Mexico (acc. FLUKE).

Volucella musta Williston

British Guiana: Kartabo. Type-locality: Brazil.

Volucella nigrifrons Hine

British Guiana: Bartica (Type-locality).

Volucella obliquicornis Curran

British Guiana: Tumatumari, Kamakusa (Type-locality).

+ **Volucella pallens** Wiedemann

SURINAME! Paramaribo, 3 ♀: 25.8.1958, 15.10.1958 and 15.5.1959.

Described from Brazil. Further distribution: Texas; Mexico; West-Indies; Cuba; Jamaica; Guatemala; Colombia.

In the author's collection many specimens from Brazil.

+ **Volucella pallens** var. **quadripunctata** nov. var. (*See Appendix*).

SURINAME! Paramaribo: 1 ♂, 10.5.1959; 3 ♀, May 1957, 18.8.1957 and 20.2.1958; Estate Morgenstond, 4 ♂, 2 ♀, 5 & 7.9.1958.

+ **Volucella pallida** Macquart

SURINAME! 1 ♀, Paramaribo, Cultuurtuin, 23.1.1951, D. Piet coll., in the author's collection.

This specimen agrees rather well with the description; the latter, however, is very insufficient and so the identification is not quite certain.

Described from "Guiana" without further locality; not recorded in FLUKE's Catalogue.

+ **Volucella picta** Wiedemann

SURINAME! Dordrecht, Commewijne, 1 ♂, 27.5.1958; 1 ♀, Paramaribo, 4.2.1960; 1 ♀, 3.9.1960.

Distribution: Brazil; Argentina; Guatemala; Mexico; Cuba. (acc. FLUKE).

+ **Volucella tympanitis** Fabricius

SURINAME. Paramaribo: 2 ♂, May 1957 and 7.9.1958; 2 ♀, Sept. 1957 and 3.5.1959. – SM: 1 ♂, Paramaribo, 17.7.1944, Geijskes; 2 specimens, Cultuurtuin, 26.1.1939 and 15.8.1939, Geijskes; 1 specimen, Ma Retraite, 5.7.1939, Geijskes.

The latter three specimens were identified by CURRAN.

The type-locality of *Vol. ardua* Wiedemann is Suriname. According to CURRAN who studied WIEDEMANN's type-specimens, *ardua* Wiedemann is a synonym of *tympanitis* Fabricius.

British Guiana: Kartabo (acc. CURRAN). Further distribution: Brazil; Panama; Mexico (acc. FLUKE).

Volucella vaga Wiedemann

British Guiana: Kartabo (acc. CURRAN). Described from Brazil.

Volucella vitripennis Curran

British Guiana: Kartabo (Type-locality).

Genus **Ornidia** Lepelletier & Serville

+ **Ornidia aemula** Williston

SURINAME! Paramaribo: 3 ♂, 14.6.1958; 15.10.1959; January, 1960; 1 ♀, 20.6.1958; Estate Morgenstond: 1 ♂, 1 ♀, 7.5.1959; 2 ♀, 5.9.1958; Zanderij: 2 ♀, 6.4.1959; Jodensavanne: 1 ♀, 22.6.1957. – ZMA: 1 ♂, 1 ♀, Cultuurtuin, 22 & 21.1.1951, D. Piet.

By WILLISTON described as *Volucella aemula* from Brazil; CURRAN correctly transferred it to *Ornidia*. This has been overlooked by FLUKE who listed the species under *Volucella*.

+ ***Ornidia obesa* Fabricius**

SURINAME. Numerous specimens from Paramaribo, Estate Morgenstond, Republiek, Coronie. 2 ♂, 1 ♀, Coronie, 11.3.1959, "at light." The dates cover the whole year. - SM: 13 specimens: Cultuurtuin, Charlesburg, Zanderij, Combé, Geijskes. - ZMA: 1 ♂, Cultuurtuin; 1 ♀, Zanderij, D. Piet. - RML: 1 ♀, Tibiti Savanne, 17.1.1949, Geijskes.

British Guiana: Kartabo; Bartica; Kalacoon (acc. CURRAN).

This species is very common in the Neotropical Region and is also recorded from tropical Africa, Mauritius, Madagascar, New Caledonia. It was already recorded from Suriname by MACQUART and v. D. WULP.

+ ***Ornidia obesoides* Giglio-Tos**

SURINAME! 1 ♂, 1 ♀, Jodensavanne, 22.6.1957. - ZMA: 1 ♀, Paramaribo, 7.11.1950, D. Piet.

These three specimens may be identified as belonging to *obesoides* as their legs are more or less partly reddish, their wings are nearly immaculate. However, all three of them give an impression of being more or less immature.

Subfamily ZELIMINAE

Genus ***Neplas*** Porter

+ ***Neplas azteca* Curran**

SURINAME! 1 ♂, Kabelstation, 21.10.1958; 2 ♀, Paramaribo, 22.6.1958 and 25.12.1958.

Described by CURRAN from Honduras: Puerto Castilla.

***Neplas grandifemoralis* Curran**

British Guiana: Kartabo (Type-locality).

***Neplas palitarsis* Curran**

British Guiana: Kartabo (Type-locality).

+ ***Neplas smarti* Curran**

SURINAME! 3 ♂, 1 ♀, Kabelstation, 21/24.10.1958.

British Guiana: Kaieteur (Type-locality).

***Neplas vagans* Wiedemann**

British Guiana: Kartabo, Bartica (acc. CURRAN).

Further distribution: Brazil; Panama (acc. FLUKE).

Genus *Acrochordonodes* Bigot+ *Acrochordonodes dentipes* Fabricius

SURINAME! Paramaribo: 2 ♂, 2 ♀, 5.10.1957; 9.1.1958, 29.12.1958. – ZMA: 1 ♂, 6.12.1950; 1 ♀, 18.11.1950, D. Piet. – SM: 1 specimen, Bot. Garden, 12.2.1941, Geijskes (det. CURRAN).

Described from "Cayenne," French Guiana. Distribution: Regions neotropical and nearctic (acc. FLUKE).

Senogaster coeruleus Macq. is generally considered to be a synonym.

Genus *Cerlogaster* Williston+ *Cerlogaster arethusa* Hull

SURINAME. Paramaribo, 1 ♀, 25.9.1958; Estate Morgenstond, 1 ♀, 18.9.1958, "indoors."

In his description HULL does not designate a type specimen nor a type-locality, but FLUKE's Catalogue records Suriname as habitat.

Cerlogaster funebris Hull

British Guiana: Essequibo River, Moraballi Creek (Type-locality).

+ *Cerlogaster scutellata* Curran

SURINAME! 1 ♂, Paramaribo, 27.8.1941, Geijskes.

British Guiana: Kartabo (Type-locality).

Genus *Crepidomyia* Shannon+ *Crepidomyia plagiata* Wiedemann

SURINAME! RML: 4 ♀, Nassau Mts., 3/19/31.3.1949, Geijskes.

British Guiana: Kamakusa (acc. CURRAN).

Further distribution: Brazil; Amazon.

Subfamily ERISTALINAE

Genus *Quichuana* Knab+ *Quichuana aurata* Walker

SURINAME! 1 ♂, Houttuin, 22.6.1960.

Type-locality: Amazons. Further known from Colombia and Peru.

+ *Quichuana picadoi* Knab

SURINAME! 1 ♀, Paramaribo, Febr. 1959; 1 ♀, 29.10.1960; Houttuin, 2 ♂, 2 ♀, 22.6.1960.

Further distribution: Costa Rica; Colombia.

Genus **Habromyia** Williston**Habromyia langi** Curran

British Guiana: Kamakusa (Type-locality).

Genus **Eristalis** Latreille+ **Eristalis aemula** Williston

British Guiana: Bartica (acc. CURRAN). In the author's collection 2 ♀ from El Salvador (Kruseman coll. & don.).

Further distribution: Mexico; Panama; Guatemala.

+ **Eristalis agrorum** Fabricius

SURINAME! 1 ♂, Estate Morgenstond, 10.9.1958; 2 ♀, Paramaribo, 2.12.1957 and 20.4.1958. – ZMA: 3 ♂, 2 ♀, Zanderij, Dec. 1950, D. Piet. – RML: 2 ♂, Tibiti Savanne, 6/8.1.1949, Geijskes c.s.; 3 ♀, Coroni, Coroni-weg, Piket 216, 21/28.12.1948, Geijskes c.s.; 1 ♀, Nassau Mts., 8.3.1949, Geijskes c.s.

Further Distribution: West Indies; Brazil; Argentina; Paraguay.

Eristalis alacris Curran

British Guiana: Kamakusa (Type-locality).

FLUKE's Catalogue records *E. alacris* as a synonym of *E. ochracea* Will. though CURRAN explicitly compares *alacris* with *ochracea*, and concludes that *alacris* is a distinct species. Both the species are unknown to the present writer.

+ **Eristalis albifrons** Wiedemann

SURINAME! 4 ♂, Paramaribo, 29.3.1959; 2 ♀, Estate Morgenstond, 1 & 7.5.1959. One specimen from Morgenstond bears the notation: "This species was very frequent here at the end of March." – SM: 1 specimen, Cultuurtuin, 12.4.1939; 2 specimens Nickerie, 8.6.1938, Geijskes (det. Curran); 3 ♂, 2 ♀, Cultuurtuin, 12.4.1950, Geijskes.

Further distribution: West Indies; Mexico; Guatemala; Brazil (acc. FLUKE). In the author's collection 6 ♂, 2 ♀ from Curaçao, B. de Jong leg.

Eristalis argyropila Hull

French Guiana: Mana River (Type-locality).

+ **Eristalis conica** Fabricius

SURINAME! 12 ♂, 10 ♀, along the way from Paramaribo to Coronie, 1.4.1959. – ZMA: 1 ♂, Charlesburg, 9.11.1950; 1 ♀, Zanderij, 15.12.1950, D. Piet.

British Guiana: Bartica; Kartabo (acc. CURRAN).

Further distribution: Brazil; Colombia; Guatemala. (acc. FLUKE).

+ *Eristalis erratica* Curran

SURINAME! RML: 1 ♀, Nassau Mts., 21.3.1949, Geijskes c.s.

Further distribution: Brazil; Venezuela; Colombia; Canal Zone. (acc. CURRAN).
In the author's collection 3 ♀ from Argentina.

+ *Eristalis fasciata* Wiedemann

SURINAME! 2 ♂, Paramaribo, 2.6.1957 & 22.9.1957; 1 ♂, Leonsberg, 14.11.1957; Estate Morgenstond: 1 ♀, 2.7.1959. – SM: 1 ♀, Manlobbi, 28.2.1952, Geijskes; 1 ♂, Coeroeni Isl., 17.8.1959, Creutzberg.

British Guiana: Kartabo (acc. CURRAN).
Further distribution: Mexico; Guatemala; Venezuela; Brazil (acc. FLUKE).
In the author's collection a female from Canal Zone.

Eristalis flavipennis Macquart

"Guiana" (Type-locality). No further particulars known. Not inserted in FLUKE's Catalogue.

+ *Eristalis florea* Hull

SURINAME! Paramaribo: 1 ♂, 5.6.1957; 3 ♀, 12.8.1957; 3 ♀, 15.8.1957; 1 ♀, 14.12.1957; 1 ♀, 17.1.1958; 1 ♀, 4.6.1959; Leonsberg: 1 ♀, 14.7.1957; Coronie: 1 ♂, 12.11.1959. – ZMA: Cultuurtuin, 1 ♂, 1 ♀, 18.1.1951; Zanderij: 1 ♂, 21.12.1950, D. Piet.

British Guiana: Kartabo; Bartica (Type-locality); Arakaka (acc. CURRAN).

Eristalis fuscipennis Macquart

Suriname (Type-locality). No further particulars known. Not in FLUKE's Catalogue.

Eristalis hortorum Fabricius

Suriname. FABRICIUS described the species from St. Thomas in 1775. In 1776 DE GEER described a *Musca surinamensis* from Suriname, which is the same species as *hortorum* Fabr., according to WIEDEMANN (1830).

Further distribution: Puerto Rico (acc. FLUKE).

Eristalis inversa Wiedemann

Suriname. (Type-locality). Not in FLUKE's Catalogue. After 1830 the species has never been recognized again. CURRAN (1930, Amer. Mus. Nov. 411: 24) discussed the species but couldn't come to a conclusion with certainty.

"The type of *inversus* is in the Frankfort Museum and will have to be examined before the position of the species can be determined" (CURRAN).

Eristalis langi Curran

SURINAME! RML: 1 ♀, Nassau Mts., 22.2.1949, Geijskes c.s.

British Guiana: Kamakusa, Kartabo (Type-locality).
Further distribution: Brazil (acc. CURRAN).

Eristalis lateralis Walker

"Cayenne; Jamaica; Mexico; St. Paul [= São Paulo, Brazil?]; Chili" (acc. WALKER).

"Allied to *E. fasciatus* Wied." WALKER.

Eristalis minutalis Williston

British Guiana: Kartabo (acc. CURRAN). Type-locality: Mexico.

Further distribution: Honduras (acc. FLUKE).

Eristalis mirabilis Hull

British Guiana: Arakaka (acc. CURRAN). Type-locality: Colombia.

Eristalis obliqua Curran

British Guiana: Mazaruni (Type-locality); Moraballi Creek, Essequibo River.

Further distribution: Peru (acc. CURRAN).

+ **Eristalis obsoleta** Wiedemann

SURINAME! Paramaribo, 12 ♂, 15 ♀, all taken in the second half of 1957. – SM: 1 ♂, Coeroeni Isl., 10.10.1959, Creutzberg; 1 ♀, Wonotobo – fall, 24.7.1959, Bolwerk; 1 ♀, Wonotobo, 2nd. Camp, 30.7.1959, Geijskes. – ZMA: 1 ♂, 2 ♀, Cultuurtuin, Nov. 1950 & Jan. 1951; Charlesburg, 9.11.1950, D. Piet. – RML: 1 ♀, Coronie, 12.12.1948; 2 ♀, Moengotapoe – Wia Wia, 18.11.1948, Geijskes c.s.

British Guiana: Kartabo (acc. CURRAN).

Further distribution: Neotropical Region (acc. FLUKE).

Eristalis ochracea Williston

See *E. alacris* Curran. Further distribution: Mexico; Brazil (acc. FLUKE).

+ **Eristalis penaltis** Curran

SURINAME! Estate Morgenstond, 1 ♂, 14.9.1958; Paramaribo: 2 ♀, May & Aug. 1957; 1 ♂, 4.6.1959; 1 ♀, 22.12.1960. – SM: 1 specimen, Charlesburg, 9.4.1941, Geijskes (det. CURRAN).

The specimen taken in May 1957 is very small (8 mm); the normal length is about 12 mm.

British Guiana: Kartabo (1 ♂, holotype).

Eristalis pusilla Macquart

French Guiana.

According to MACQUART the type-locality is "de Lamana" what surely is a misspelling for "de la Mana," Mana being the name of a river and a town in French Guiana.

British Guiana: Georgetown (acc. CURRAN).

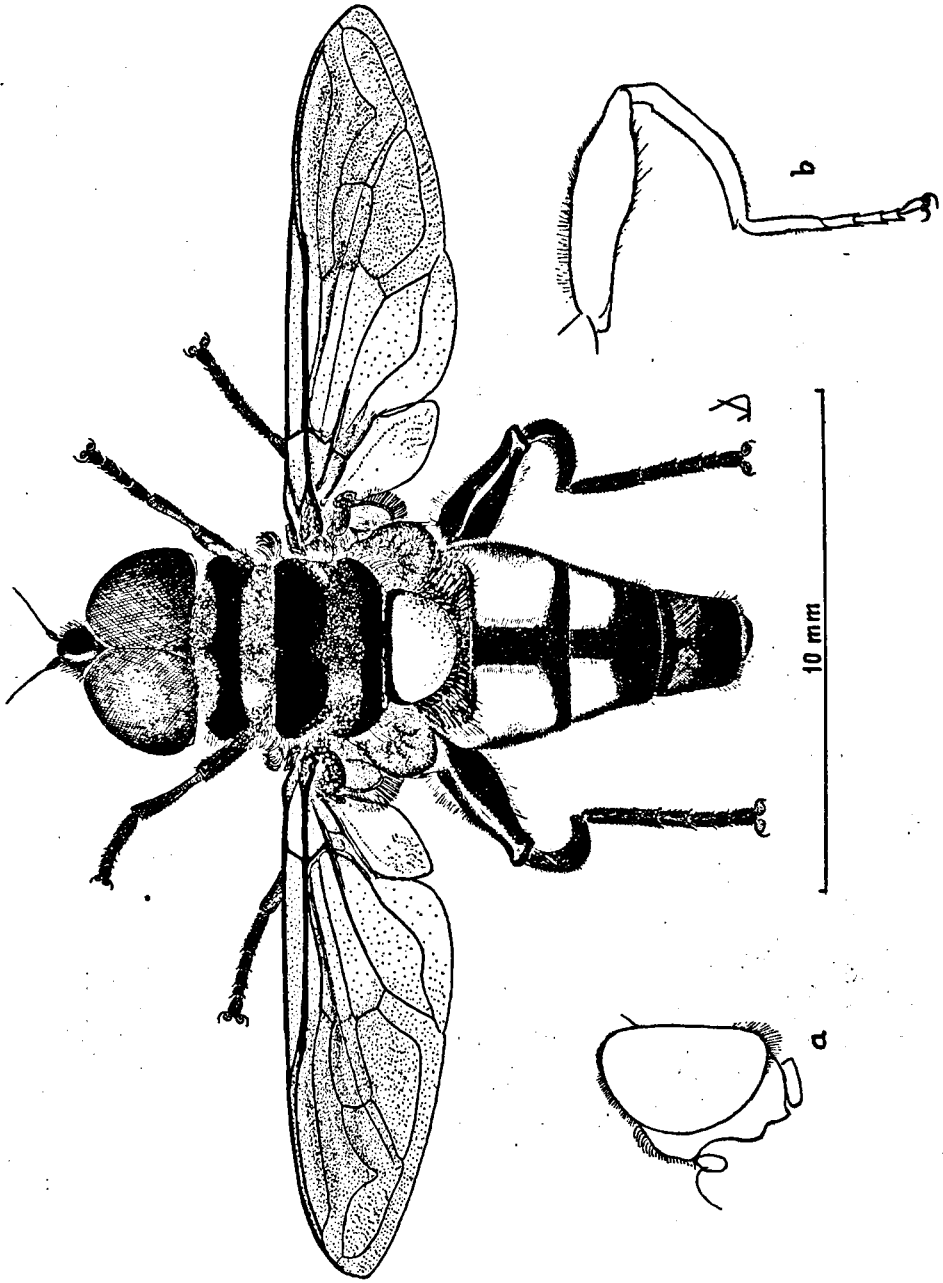


Fig. 1. *Eristalis scutellaris* Fabr., male, from SURINAME, Charlesburg. — a, head in profile; b, hind leg.

***Eristalis pygmaea* Macquart**

Described from Suriname, but no further records are known. Not listed in FLUKE's Catalogue.

According to the description the mesonotum has four longitudinal, dull black bands; length about 6 mm.

+ *Eristalis scutellaris* Fabricius

Fig. 1-4

SURINAME! Paramaribo: 14 ♂, 10 ♀; frequent during the whole year. — SM: Charlesburg, 1 ♂, 2 ♀, with a note: "Larva in refuse-dump (detritus) of *Atta cephalotes* nest; Pupa 6 November, Imago 3 December '39, Geijskes." These specimens have their empty puparium at the pin. — ZMA: 1 ♀, Kabelstation, 7.1.1951, D. Piet. — RML: 1 ♀, Nassau Mts., 2.3.1949, Geijskes c.s. TRINIDAD. ZMA: 1 ♂, Port of Spain, 25.10.1950, D. Piet.

British Guiana: Kartabo; Bartica (acc. CURRAN).

Further distribution: Neotropical Region (acc. FLUKE).

+ *Eristalis spectabilis* Hull

SURINAME! 1 ♀, Paramaribo, 12.1.1958. Also in the writer's collection 1 ♂, Zanderij, 15.12.1950, D. Piet coll. and don. — SM: 1 ♀, Paramaribo, Jan. 1939, Geijskes (det. CURRAN).

British Guiana: Bartica (acc. CURRAN). CURRAN records also 3 ♀ from Venezuela.

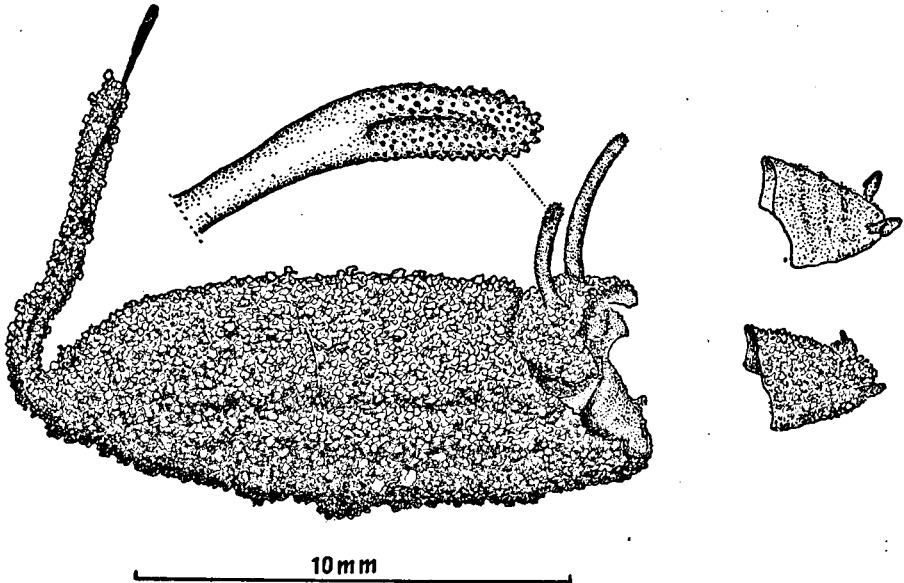


Fig. 2. *Eristalis scutellaris* Fabr. — Empty puparium from which the male, illustrated in fig. 1 was reared.

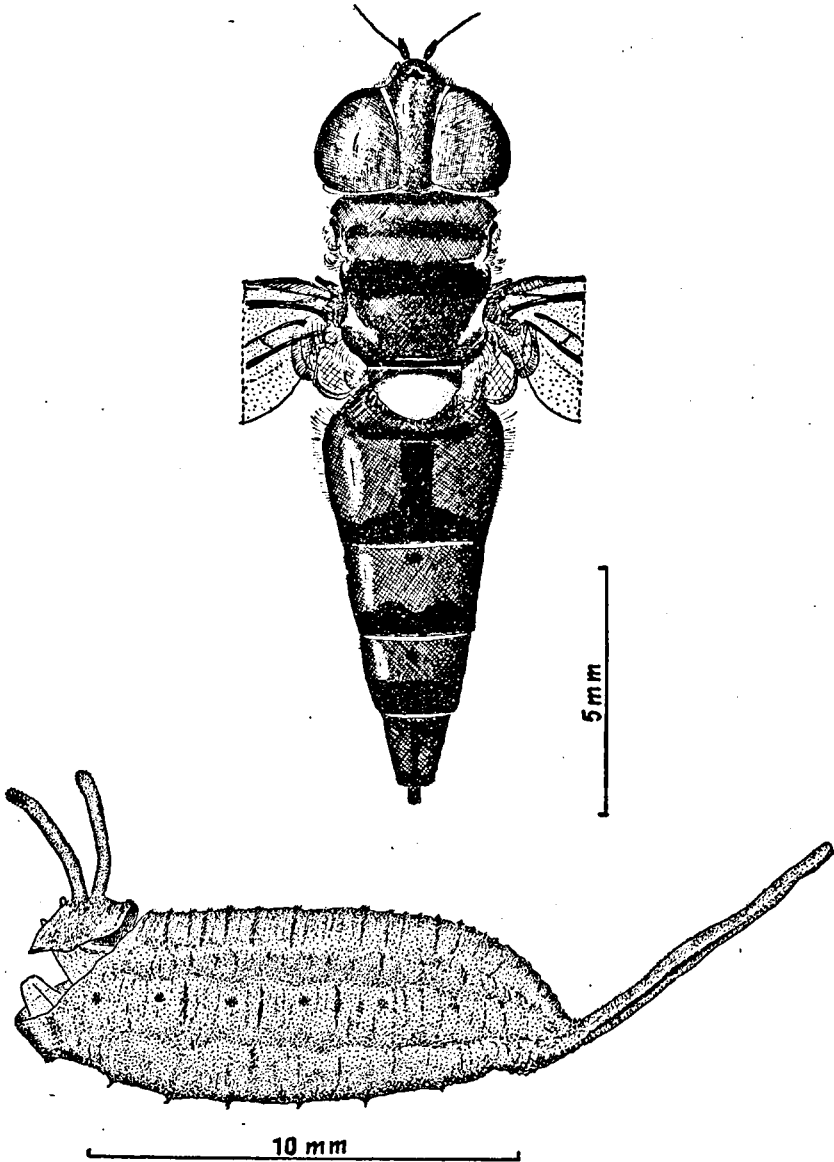


Fig. 3-4. *Eristalis scutellaris* Fabr., female, from SURINAME, Charlesburg, with empty puparium.

Eristalis surinamensis Macquart

Described by MACQUART from Brazil and Suriname. Considered by FLUKE as a distinct species but in every case the name is a homonym of *Eristalis (Musca) surinamensis* de Geer. In KERTÉSZ's Catalogue *surinamensis* Macquart is mentioned as a synonym of *fasciata* Wied.

+ **Eristalis vinetorum** Fabricius

SURINAME! Paramaribo, 13 ♂, 24 ♀; frequent during the whole year. – SM: 6 specimens, Cultuurtuin, Geijskes (det. CURRAN). – ZMA: 3 ♂, 2 ♀, surroundings of Paramaribo, and Zanderij, D. Piet.

British Guiana: Kartabo, Penal Settlement; Bartica and Kalacoon (acc. CURRAN). In the author's collection specimens from Curaçao, Cuba and Mexico. This common species is very widely distributed in the Neotropical region.

Genus **Meromacrus** Rondani**Meromacrus anna** Curran

"British Guiana" according to FLUKE's Catalogue, but the present writer thinks this is an error, since he can't find any citation referring to that country. CURRAN described *M. anna* from Panama, Canal Zone. At the end of the description CURRAN compared *anna* with specimens of *M. niger* Sack from Brazil, British Guiana and Peru. This is probably the cause of FLUKE's mistake since he records the latter three countries in the same sequence.

+ **Meromacrus brunneus** Hull

SURINAME! 1 ♀, probably belonging to this species.

HULL described only a single ♂ from British Guiana, Wismar.

+ **Meromacrus fucatus** Hull

SURINAME, described from a single ♀. In the author's collection 3 ♀, Paramaribo, 20.4.1958, 11.5.1959, 5.7.1959.

Meromacrus milesia Hull

French Guiana.

In Amer. Mus. Novit. 1200, HULL gives a key to the species of *Meromacrus*. In this key *M. milesia* is incidentally mentioned but no further description has been given as far as known.

+ **Meromacrus niger** Sack

SURINAME! Paramaribo, 2 ♀, May and July 1957. – SM: 1 ♂, Cultuurtuin, 2.6.1951; 1 ♀, Combé, 7.6.1943; Geijskes. Moreover one specimen, Lelydorp, 25.8.1933, Geijskes (det. CURRAN).

British Guiana: Kartabo (acc. CURRAN).

Further distribution: Panama; Argentina; Paraguay; Brazil; Peru.

+ **Meromacrus pratorum** Fabricius

SURINAME! 1 ♀, Estate Morgenstond, 31.3.1959.

British Guiana: Kartabo (acc. CURRAN).

Further distribution: Panama; Argentina, Paraguay, Brazil; Peru.

Genus **Lycastrirrhyncha** Bigot+ **Lycastrirrhyncha quinta** nov. sp. (*See Appendix*)

SURINAME! 4 ♀, Paramaribo, May '58, 17.8.1959, 14.1.1960, and 25.12.1960.

Lycastrirrhyncha titillans Hull

British Guiana: Mackenzie, Demerara River (Type-locality).

APPENDIX

Baccha wilhelmina nov. spec.

Fig. 5

Male – *Head* large, subglobular; eyes bare, divided by a horizontal line into two halves, the upper facets scarcely enlarged. Vertical triangle long, narrow, about as long as the line of contact of the eyes, dull reddish-black, the bristly pile short, black, directed forward; ocellar triangle isosceles, in profile distinctly raised above level of eyes. Front dark yellow with a minute black spot in the eye corner; its pile erect, black. Above the base of antennae a vertical, dark-yellow area with a sharp margin and a large, glittering black spot. Antennae yellow, upper margin of third joint darkened; arista dark reddish. Face rather narrow, yellowish, in some lights a little iridescent, the central knob darker, narrow in frontal view but large and prominent in profile; below it, the face recedes to the oral margin. Facial pile black. Cheeks linear, yellow. Occipital fringe whitish.

Thorax black, dulled lead-grey by whitish pollen. Mesonotum with four opaque black vittae, the median pair broad, nearly reaching the posterior margin, the outer ones rather narrow, ending before the post-calli. Behind the anterior margin of the mesonotum there is a transverse row ("collar") of long, white bristles. Scutellum very dark brown. Pile of mesonotum and scutellum very short, black. There are some long, yellowish hairs upon the notopleurae. Metascutum large, lead-grey.

Abdomen club-shaped, short, as long as head and thorax together. First segment six times as broad as long, steel-black, with a lateral fringe of long white hairs; second segment narrowed from base to anterior third of its length, thereafter moderately widening to the posterior margin, which is a little longer than the base; this segment is shining black, with an opaque black, pre-apical fascia which is somewhat produced medianly. Third, fourth and fifth segments shining black, each with four orange or egg-yellow vittae. Third segment strongly widening from base to apex, about twice as broad as long, its inner vittae parallel, widely separated, its outer vittae oblique, short, about half as long as the inner ones. Fourth segment more than twice as broad as long, scarcely narrowed from base to apex, its four vittae parallel, beginning at the base but not reaching the posterior margin. Fifth segment short, about three times as broad as long, the vittae similar to those of the foregoing segment. The right and the left pair of vittae on the third and fourth segments may be connected at their base. Hypopygium shining, black.

Legs. Fore and middle legs brown, their femora a little darker, their tibiae with a faint, dark ring, their tarsi, except for the apical joint, also somewhat darker-brown. Hind legs black, the extreme tip of the femora and the tarsi, except the base of the metatarsi, light brown. Hind coxae with long, white hairs, hind tibiae anteriorly and posteriorly with thickset, short, black, depressed bristles. Middle femora with a thin row of long, white hairs. *Wings* hyaline, the subcostal cell light yellow, without stigma; a quite indistinct darkening with black between r-m and the costa, wing base also somewhat darkened. Alulae large. *Squamae* brown with long, blackish fringe. *Halteres* yellow.

Female – Front at level of antennae less than one third of the breadth of head, narrowing to the vertex, lead-grey, along the orbits with long triangles of reddish-brown pollen. Ocellar swelling opaque black.

Abdomen of nearly the same shape as in the male, but the second segment shorter and broader. Dark markings of the wings much more conspicuous and extensive, triangularly expanded and reaching posterior margin of wing.

Length (in both sexes) about 9 mm.

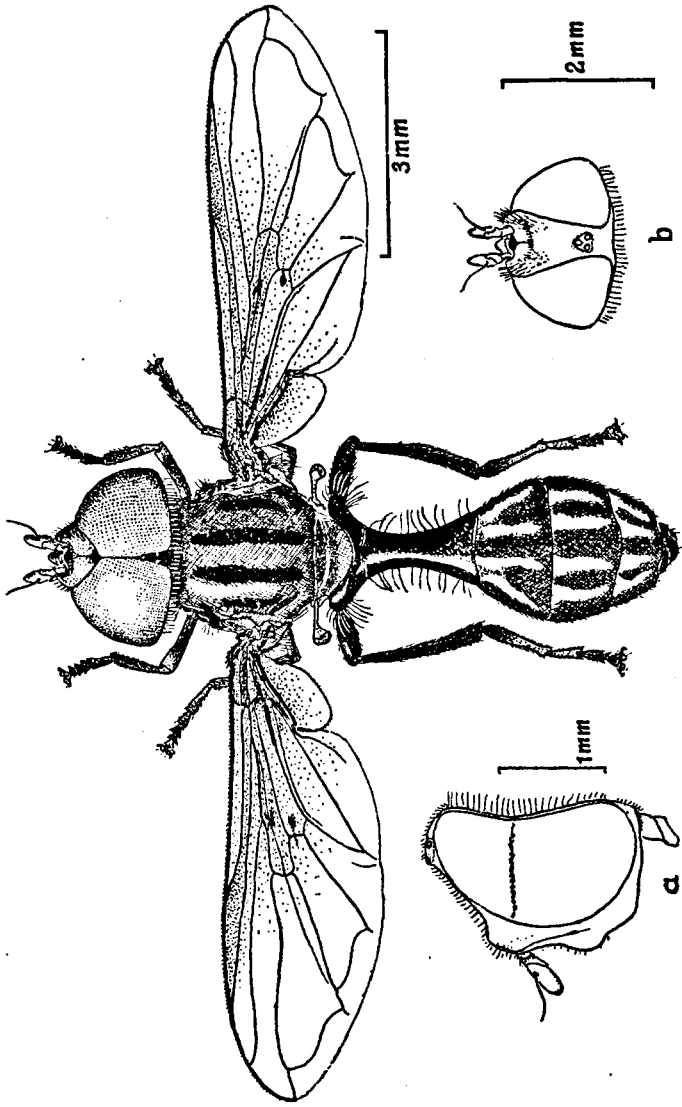


Fig. 5. *Baccha wilhelmina* n. sp., male, from SURINAME, Paramaribo. — a, profile of head of male; b, head of female, as seen from above.

Holotype ♂, and allotype ♀, Paramaribo, 9.1.1958, P. H. VAN DOESBURG, JR., coll.; paratypes: 2 ♂, Paramaribo, 28.7.1957, 2 ♀, Paramaribo, 12.1.1958 & 10.5.1959, same collector.

A couple of paratypes will be placed in the collection of the Suriname Museum, Paramaribo.

The writer takes great pleasure in dedicating this species to his son's wife Mrs. WILHELMINA VAN DOESBURG.

***Volucella erythrocephala* de Geer**

In 1776, in his "Mémoires," T. 6: 146, DE GEER described a *Musca erythrocephala* which, as far as is known, has never been identified since.

Owing to the fact that it is very difficult for most of the present students of Syrphidae to consult DE GEER's "Mémoires" I quote his description of *M. erythrocephala*:

"2. Mouche herissée à poil barbu, à corps court et aplati d'un verd bronzé, à tête jaune et yeux bruns.

Musca (erythrocephala) antennis plumatis pilosa, corpore brevi depresso viridi-aeneo, capit testaceo, oculis fuscis.

Mouche bronzée à tête jaune (Pl. 29, Fig. 2). Cette Mouche, qui est également de Surinam, et qui ressemble beaucoup à nos Mouches dorées communes, ayant la grandeur des Mouches des appartements, a cependant la tête et le corps plus larges et plus gros, et le ventre large, aplati et presque circulaire. Tout le corps est d'un vert bronzé et comme un peu doré, mais la tête est d'un jaune d'ocre, avec deux grands yeux rouges-bruns. Les pattes sont noires ou d'un brun obscur, et les ailes d'un brun clair un peu jaunâtre. Les antennes sont à palette allongée plate avec un poil à barbes fines."

The specimen shown in the figure on DE GEER's plate 29 fig. 2, is 10 mm long. Judging by the separated eyes, it is a female. It is not possible to reach more detailed conclusions from this ill-defined drawing. So far the present author has not encountered a Suriname specimen which answered to the above description.

***Volucella pallens* Wied., var. *quadripunctata* nov. var.**

It is a well-known fact that the abdomen of *Vol. pallens* Wied. is normally marked by six black spots lying sublaterally on the apical margin of the second, third and fourth segments.

The spots of the second segment are missing in specimens of the variety. The writer has seen more specimens from Suriname

belonging to the variety than specimens of the normal form. In one of the specimens recorded under *pallens* s.str. the spots are minute and hardly visible.

Holotype ♂, and allotype ♀, Paramaribo, 7.9.1958, P. H. VAN DOESBURG, JR. leg. Paratypes: 4 ♂, 4 ♀ (cf. List).

Genus *Lycastriirrhyncha* Bigot

KEY TO THE SPECIES

1. Mesonotum with six vittae, vittae 2-3 and 4-5 posteriorly united (Mexico) ♀ *mexicana* Curran 2
- Mesonotum with three or four vittae 2
2. Mesonotum with three vittae. Basal half of scutellum velvet-black (Mexico) ♀ *willistoni* Coquillet 3
- Mesonotum with four vittae 3
3. Face brownish red. Scutellum dark reddish (Brit. Guiana) ♀ *titillans* Hull 4
- Face blue-or black 4
4. Scutellum with central red spot (Amazonas; Mexico) ♀ *nitens* Bigot
- Scutellum opaque black, base and broad margins steel-blue ♀ *quinta* nov.sp.

All the species have been described from female specimens only. The flies belonging to this genus seem to be very rare.

Lycastriirrhyncha quinta nov. sp.

Female - *Head*. Face and snout shining black, face between snout and eyes heavily greyish pollinose, between base of snout and antennal tubercle with a band of sparse, grey pollen. Sides of snout with scattered, fine, hair-bearing punctures on their basal half. Front black, between antennal tubercle and the anterior ocellus

dusted with sparse, grey pollen and with three opaque black spots: one elongate spot in front of the anterior ocellus, and one at either side at the orbits. Behind the anterior ocellus the vertex is shining black; behind each of the posterior ocelli there is a small, opaque, black spot. Vertical and frontal pile long, erect, black. Occiput linear, grey, with long black fringe on its upper part.

Thorax shining steel-blue; mesonotum with four opaque black vittae, ending before they reach the posterior margin; the median two begin at the anterior margin, and are narrowly separated; the outer ones begin level with the humeri, are broadly separated from the median pair, and divided by the suture. Postcalli opaque black. Disc of scutellum opaque black; its base, and the broad margins, steel-blue. Thoracic and scutellar pile pale, short, but somewhat, longer on the posterior part of the mesopleurae, on the metapleurae and on the margin of the scutellum. Apex of scutellum with a few black hairs.

Abdomen shining black, the second segment with an indefinite, large, reddish spot on either side sublaterally. First segment black, dulled by grey pollen. Second segment with a broad, opaque black, median vitta which is linearly broadened along the anterior margin; posteriorly the vitta is divided into two oblique feet, leaving a little shining triangle on the posterior margin. Third segment with a round, opaque black spot on the anterior margin and two similar ones on the posterior margin. Fourth segment similar to the third, the spots a little smaller and more transverse. Fifth segment with only a minute median spot on the anterior margin. Venter black; the incisures, and the broad sides of the second and third segments, dull brownish. Abdominal pile short, greyish, but longer on the sides of the second, fourth, and fifth segments, and on the venter.

Legs black; the tip of the femora, the basal third of the fore tibiae, the basal half of the middle tibiae, the narrow base of the hind tibiae, and the first two joints of the middle tarsi, light brown. Anterior femora with a row of long, isolated, hairs; hind femora below with thickset, short, black, bristly hairs. *Wings* brownish with blackish veins; stigma linear, black. The large *squamae* and their fringe, white. *Halteres* yellowish.

Holotype ♀, Paramaribo, May 1958, P. H. VAN DOESBURG, JR., coll. Paratypes, 3 females, Paramaribo, 17.8.1959; 14.1.1960; and 25.12.1960, same collector.

The type-specimens of the species described above are in the author's collection.

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